00014310

PROJECT TITLE : Nitrate Reduction by Controlled Fermentation

PERIOD COVERED : December 1st - 24th, 1980

WRITTEN BY : C. Ruf

1. TRIALS

1.1. No denitration trials were carried out in December due to maintenance of the pilot plant. However some extraction, reapplication and drying trials were made with strips (Ref. 1).

1.2. Trials with both RL stems and Burley strips will probably be run next year. Therefore a certain amount of each of these feedstocks has already been ordered from the Leaf Department (Ref. 2).

2. EVALUATION OF DENITRATION PROCESSES

On December 2nd, $1980\,^\circ$ Mr. Häusermann took part in a meeting in Richmond.

The aim of the meeting was to decide whether the RL sheet of the Park 500 third line should be fully denitrated, and if so, which of the three processes should be adopted (Ref. 3). The decision taken was mainly based on the comparative study prepared by the Manufacturing Engineering Department. (Ref. 4). It was decided to fully denitrate RL in the third line and to test one electrodialysis unit for 1/7 of the SEL flow in Park 500 before a final decision will be taken by Richmond management.

STRIP DENITRATION

- 3.1. We received some information on the denitrated strips treated in trial NINO 65 from Richmond (Ref. 5).

 After Burley casing, these strips were blended and cut to produce US Marlboro cigarettes. We have received some of these cigarettes and are expecting the corresponding analyses.
- 3.2. When a strip extract is analyzed, a great reduction of ammonia nitrogen, after addition of just sugar, is observed. Experiments with a solution of ammonium salts in water led to the same conclusions (Ref. 6). This phenomenon, which could be related to an amino sugar reaction, will be further investigated.

4. PILOT PLANT

See monthly report : "Pilot Plant Operations", December 1980, by N_{\star} Lüthi.

5. MISCELLANEOUS

A presentation on strip denitration was given by Messrs Friedrich, Lüthi and Ruf on December 9th. It was followed by a brain storming session on product evaluation.

6. REFERENCES

- Ref. 1: "Pilot Plant Operations", December 1980, by N. Lüthi.
- Ref. 2: Letter from C. Ruf to H. Boeckle, December 19th, 1980.
- Ref. 3 : "Denitrated sheet on third Park 500 line", by
 M. Hausermann, December 9th, 1980.
- Ref. 4 : "Second generation RL denitration for line III Park 500", by M. Maher, November 19th, 1980.
- Ref. 6: Notebook No. 2, p. 41 43, J.-M. Chassot.

PROCESS DEVELOPMENT

C. Ruf

CLR/sde January 9th, 1981